

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF WISCONSIN**

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**1000 FRIENDS OF WISCONSIN, INC.,  
Plaintiff,**

**v.**

**Case No. 11-C-0545**

**UNITED STATES DEPARTMENT OF  
TRANSPORTATION, et al.,  
Defendants.**

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**DECISION AND ORDER**

The plaintiff in this case, 1000 Friends of Wisconsin, Inc., brings claims under the National Environmental Policy Act (“NEPA”) and the Administrative Procedure Act, challenging a decision of the Federal Highway Administration and the Wisconsin Department of Transportation (“WisDOT”), to expand to four lanes a 19-mile segment of Wisconsin State Highway 23. In a prior decision addressing the merits of the plaintiff’s claims, I concluded that the defendants’ analysis of reasonable alternatives to the 4-lane expansion was deficient because the analysis rested on traffic forecasts that the agencies had failed to fully explain. See May 22, 2015 Dec. and Order, ECF No. 61. I vacated the record of decision approving the expansion project and remanded the matter to the agency for further proceedings. On remand, the agencies prepared a “revised technical memorandum,” in which they further explained how they arrived at the traffic forecasts that appear in the environmental impact statement for the project. See ECF No. 70-1. The agencies now move to reinstate the record of decision and for judgment in their favor. The plaintiff opposes the motion.

## I. NEPA AND APA STANDARD OF REVIEW

NEPA “declares a broad national commitment to protecting and promoting environmental quality.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). It has been described as a “procedural” or “action-forcing” statute that does not “mandate particular results” but instead requires agencies to study and describe the environmental consequences of their proposed actions. *Id.* at 348–51; *Vermont Yankee Nuclear Power Corp. v. Nat. Res. Defense Council*, 435 U.S. 519, 558 (1978). Thus, under NEPA, if an agency has adequately identified and evaluated the environmental effects of its proposed action, it is permitted to take that action even if it is expected to be environmentally costly. *Robertson*, 490 U.S. at 350. Put differently, “NEPA merely prohibits uninformed—rather than unwise—agency action.” *Id.* at 351.

NEPA requires agencies to prepare an environmental impact statement for “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). This impact statement is “a detailed analysis and study conducted to determine if, or the extent to which, a particular agency action will impact the environment.” *Highway J Citizens Group v. Minetta*, 349 F.3d 938, 953 (7th Cir. 2003). Requiring an agency to prepare an impact statement serves NEPA’s action-forcing purpose in two respects. *Robertson*, 490 U.S. at 349. First, “[i]t ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts.” *Id.* Second, it “guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.” *Id.* Thus, in the impact statement, the agency must “articulate why [it has] settled upon a

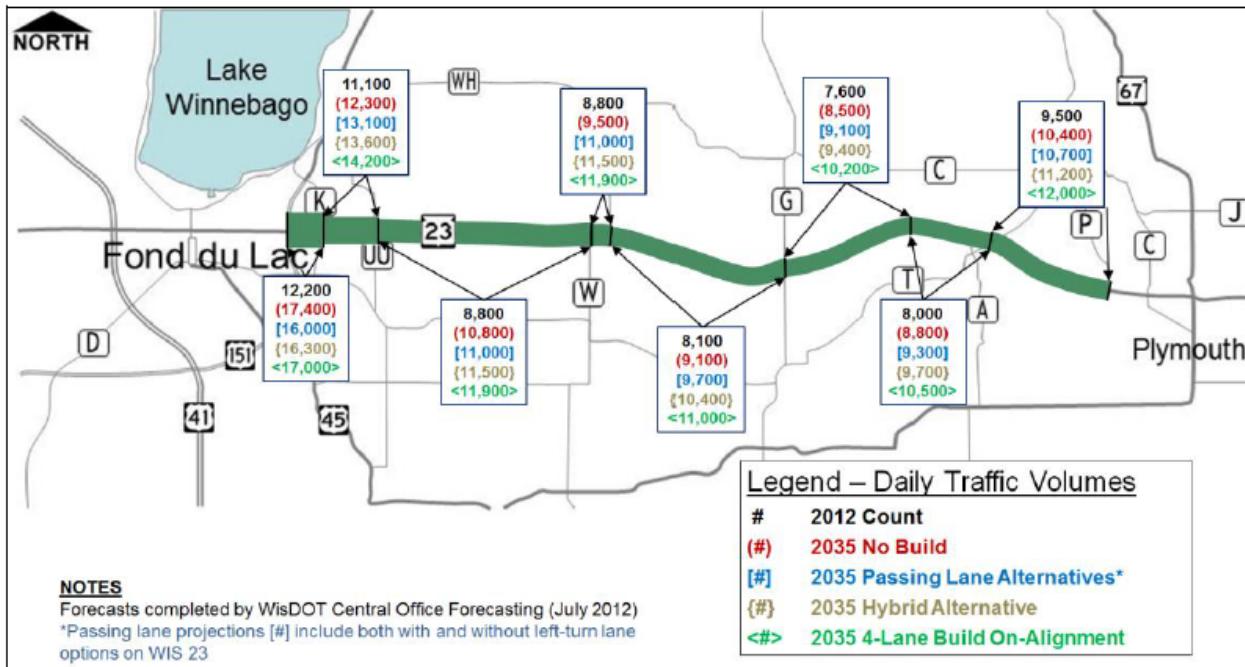
particular plan and what environmental harms (or benefits) [its] choice entails.” *Simmons v. U.S. Army Corps of Eng’rs*, 120 F.3d 664, 666 (7th Cir. 1997). The impact statement must show that agency officials have “[thought] through the consequences of—and alternatives to—their contemplated acts,” and must ensure that “citizens get a chance to hear and consider the rationales the officials offer.” *Id.*

Judicial review of an agency’s compliance with NEPA occurs under the Administrative Procedure Act, which instructs courts to set aside agency action only if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.” 5 U.S.C. § 706(2)(A); *Highway J Citizens Group*, 349 F.3d at 952.

## **II. DISCUSSION**

The deficiencies I identified in my prior decision concerned the impact statement’s discussion of reasonable alternatives. Under NEPA, an impact statement must discuss alternatives to a proposed action. 42 U.S.C. § 4332(2)(C)(iii). The NEPA regulations specify that an agency preparing an impact statement must “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” 40 C.F.R. § 1502.14(a).

In the present case, the agencies’ evaluation of reasonable alternatives was based, in part, on traffic projections through the year 2035, which WisDOT prepared in 2012. R. 21414–19. The projections are expressed in terms of daily traffic volumes for each of eight segments of Highway 23, and there are four projections for each segment—one for each reasonable alternative—along with the actual traffic counts measured in 2012:



R. 21414. The plaintiff contends that these traffic projections are flawed, in that they overestimate the amount of traffic that can be expected on Highway 23 through the year 2035. The plaintiff contends that if accurate traffic projections were used, then alternatives to expanding the highway to four lanes, such as adding passing lanes to the existing two-lane highway, would appear more attractive.

In my prior decision, I did not find that the traffic projections were flawed. Rather, I determined that I could not decide whether the projections were flawed because WisDOT had not fully explained how it applied its methodology. See Dec. and Order at 9–14. I also determined that I could not tell whether the projections were flawed because WisDOT had not explained how recently updated demographic data from the Wisconsin Department of Administration might affect the projections. *Id.* at 14–17. The revised technical memorandum attempts to explain these issues. Below, I consider whether the technical memorandum cures the deficiencies in the impact statement.

## A. Application of Traffic Forecasting Methodology

The methodology that WisDOT purported to use in projecting traffic volumes is explained in an appendix to the impact statement. See R. 21923–44 (Appendix LS-A). In this appendix, WisDOT states that traffic forecasts “are prepared and approved centrally to assure that a consistent methodology is utilized for all forecasts in Wisconsin.” R. 21938. Under this methodology, WisDOT will use two forecasting tools, provided that the forecast is for an area in which it is possible to use both tools. R. 21938–39. Highway 23 is located in an area in which it is possible to use both tools. The tools are known as the Traffic Analysis Forecasting Information System (“TAFIS”) and the Northeast Region Travel Demand Model (“TDM”). *Id.* TAFIS is an automated procedure and computer program that uses historical traffic count information to project future traffic through use of regression analysis. R. 21939; see also ECF No. 70-1 at 2. TDM is a model that attempts to provide a more nuanced understanding of future travel patterns than TAFIS. It “uses current socio-economic data, roadway networks, trip rates and other factors to calculate current and future travel patterns.” R. 21939.

TDM and TAFIS will each produce their own, independent traffic projections. However, in the appendix to the impact statement, WisDOT states that its policy is to “compare [TDM] growth rates with the TAFIS growth rates using several techniques.” R. 21940. It then explains that “[w]hen the [TDM] forecast produces a future forecast year volume greater than 10% over the TAFIS future forecast year volume, a compromise number is reached.” R. 21940. The compromise number “should generally be at the edge of the accepted 10% range in TAFIS, as long as it is also within 10% of the [TDM] forecast volume.” *Id.* The methodology states that the reason for

reaching a compromise number when TDM produces a forecasted volume that is greater than 10% over the TAFIS forecasted volume is to protect against the possibility that the TDM model is poorly calibrated. *Id.* The methodology states that, to protect against this possibility, “the decision was made to insure that forecasted volumes in [TDM] and TAFIS were to be within 10% of each other.” *Id.* The requirement to reach a compromise number when the TDM volume exceeds 10% of the TAFIS volume is also stated in a different part of the appendix. See R. 21928.

In my prior decision, I found that although WisDOT had generally explained its methodology for projecting traffic volumes in the impact statement, it had not adequately explained how it applied that methodology. Specifically, I found that WisDOT had not shown how the raw data it used resulted in the bottom-line numbers that appear in the impact statement for each of the project alternatives. Dec. and Order at 11. I noted that, among other problems, WisDOT had failed to identify the specific traffic volumes that TDM and TAFIS had independently projected for each segment of Highway 23 and to explain whether WisDOT selected compromise numbers to bring the TDM projections within 10% of the TAFIS projections. *Id.* at 11–12.

In its revised technical memorandum, WisDOT has supplied the missing information. See ECF No. 70-1 at 8–13. However, WisDOT’s explanation reveals that it did not actually follow the methodology described in the impact statement when forecasting traffic volumes for Highway 23. Although WisDOT compared the TDM projections to the TAFIS projections, ultimately it selected the TDM projection for each highway segment, even when the TDM projection was greater than 10% of the TAFIS projection. As the plaintiff demonstrates in an exhibit to its brief, see ECF No. 72-1, the

TDM projection exceeded the TAFIS projection by more than 10% at four of the seven segments for which projections were created. For these four segments, the TDM projections exceeded the TAFIS projections by 14.5%, 13.7%, 11.8%, and 18.2%, respectively, yet no compromise numbers were reached. WisDOT points out that, in these four cases, the TDM results are “within 10% of the average” of the combined TDM and TAFIS projections.<sup>1</sup> ECF No. 70-1 at 12. However, nothing in the methodology described in the impact statement indicates that being “within 10% of the average” is acceptable. Rather, the methodology as described in the impact statement clearly states that it is WisDOT policy to “insure” that forecasted volumes in TDM and TAFIS are “within 10% of each other.” R. 21940.

In administrative law, where an agency fails to follow its own rules, procedures, or methodologies, its action is likely to be found arbitrary and capricious. See *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 50 (1983) (“It is well-established that an agency’s action must be upheld, if at all, on the basis articulated by the agency itself.”); *Andershock’s Fruitland, Inc. v. U.S. Dep’t of Agric.*, 151 F.3d 735, 736 (7th Cir. 1998) (noting that “an agency must follow its own rules and doctrines until it changes them explicitly”); *Natural Res. Def. Council v. U.S. E.P.A.*, 735 F.3d 873, 881–85 (9th Cir. 2013) (vacating agency decision because agency failed to follow its own risk-assessment standards); *Lopez v. Fed. Aviation Admin.*, 318 F.3d 242, 246 (D.C. Cir. 2003) (noting that Supreme Court has held that “an agency is bound to the standards by which it professes its action to be judged”). In

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<sup>1</sup> To determine whether the TDM results were “within 10% of the average,” WisDOT averaged the TDM and TAFIS output values to determine if the TDM output and the TAFIS output were between 90% and 110% of the average. See Reply Br. at 4, ECF No. 73.

the present case, WisDOT deviated from the traffic-projection methodology that it identified in the impact statement when it failed to reach a compromise number for the segments in which the TDM projection exceeded the TAFIS projection by more than 10%. The explanation that WisDOT offers for using the TDM projections even where they were not within 10% of the TAFIS projections, i.e., because the projections “were within 10% of the average,” is not supported by the stated methodology and appears to be an after-the-fact rationalization. Thus, I cannot find that the traffic projections that appear in the impact statement were the product of a reasoned application of the agency’s stated methodology.

In their reply brief, the defendants contend that WisDOT’s failure to follow its policy of reaching a compromise projection when the TDM projection exceeds the TAFIS projection by more than 10% was justified because “other reasons” supported TDM’s reliability. Reply Br. at 5. First, WisDOT points out that TDM projected only a “modest” growth rate, which was “consistent with anticipated regional growth.” *Id.* However, the compromise projections, which would have been lower than the TDM projections, would also have been modest and consistent with anticipated regional growth. Thus, the fact that the TDM projections were themselves modest and consistent with anticipated growth does not support WisDOT’s decision to abandon its stated policy of reaching compromise numbers where TDM exceeds TAFIS by more than 10%.

WisDOT also points out that, for two of the four segments for which the TDM projections were not within 10% of the TAFIS projections, the TDM projections produced growth rates that were at or slightly below 0.5%, which under WisDOT policy

is the suggested minimum growth rate. See R. 21927 (stating that “[t]he growth rate may not be less than 0.5% or greater than 5% unless there is significant change in the model inputs such as socioeconomic data or the road network”). For these two segments, the TDM projections resulted in growth rates of 0.51% and 0.41%. ECF No. 70-1 at 21 (Table 3, column E). However, at the other two segments, the projected growth rates were 0.99% and 1.85%—well above the suggested minimum. *Id.* So I fail to see how the projected growth rates support WisDOT’s decision to abandon its stated policy of reaching compromise numbers when the TDM projections exceed the TAFIS projections by more than 10%.<sup>2</sup>

Finally, WisDOT points out that it had separately “calibrated and validated the entire Northeast Region TDM.” Reply Br. at 6. However, nothing in WisDOT’s stated methodology provides that where a TDM model has been separately validated, reaching a compromise number where its projections exceed TAFIS projections by more than 10% is unnecessary. Rather, the methodology described in the impact statement requires the TDM projection to be “checked against the TAFIS system” and that compromise numbers be reached regardless of whether the TDM model has been separately validated. R. 21928, 21940.

Before moving on, I note that WisDOT has not argued that even if it had adopted compromise projections at the four sites where the TDM projections exceeded the TAFIS projections by 10%, the analysis of reasonable alternatives would have been the

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<sup>2</sup> Also, it appears that WisDOT used the TDM projections in the impact statement even when they resulted in growth rates that were less than the suggested minimum. See ECF No. 70-1 at 21 (Table 3, column E) (reflecting growth rates of 0.47%, 0.35%, and 0.41%). It is not clear why WisDOT did this, when its stated policy is that the growth rate may not be less than 0.5% “unless there is significant change in model inputs such as socioeconomic data or the road network.” R. 21927.

same. Nor is it obvious to me that the failure to reach compromise projections was harmless. I have reviewed the discussion of reasonable alternatives in the impact statement, including the detailed discussion of reasonable alternatives that appears in a technical memorandum attached to the impact statement, see R. 21947–98, and have been unable to find anything that explains how a change in the traffic forecasts might affect the viability of the alternatives to a four-lane expansion. However, because it is clear that the traffic forecasts played an important role in the evaluation of reasonable alternatives, I cannot conclude that WisDOT’s failure to follow its own methodology and reach compromise projections was harmless.

For these reasons, I conclude that the traffic projections used in the impact statement’s evaluation of reasonable alternatives were not produced through a reasoned application of WisDOT’s stated methodology, and that the agencies’ evaluation of reasonable alternatives was deficient.

## **B. Consideration of Updated Population Data**

As I noted in my prior decision, when WisDOT built the TDM model that it applied to Highway 23, it used household population projections prepared by the Wisconsin Department of Administration to estimate growth in the region through the year 2030. R. 14179, 14333–35. These projections were based on census data from the year 2000. Shortly before the defendants finalized the impact statement in March 2014, the Department of Administration released new population projections, through the year 2040, which were based on census data from the year 2010. The agencies included these population projections in the final impact statement and discussed them in the context of the indirect and cumulative environmental effects associated with the project.

R. 21485.<sup>3</sup> The new projections reflected a lower growth rate than was reflected in the 2030 projections. In my prior decision, I found that nothing in the impact statement indicated whether the defendants considered revisiting their traffic projections and evaluation of reasonable alternatives in light of the recently updated population projections. I noted that population data appeared to be a key input in the TDM model, and that therefore a significant reduction in expected population growth would likely produce a significant reduction in expected traffic growth, which, in turn, could affect the evaluation of reasonable alternatives. Thus, I concluded that, on remand, the defendants had to consider whether to supplement the impact statement in light of the new population data. See 40 C.F.R. § 1502.9(c)(1)(ii); *Marsh v. Or. Natural Res. Council*, 490 U.S. 360 (1989).

In the revised technical memorandum that WisDOT prepared on remand, it concludes that the updated Department of Administration population projections “do not significantly change the final traffic forecasts or impact the alternative selected in the [final impact statement].” ECF No. 70-1 at 14. The reasoning underlying this conclusion is as follows: (1) TDM does not use general population projections as direct inputs to produce traffic forecasts. Instead, TDM uses “the type and location of certain developments,” such as households, employment, and other traffic generators, to forecast traffic volumes. (2) The updated general population projections do not “indicate

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<sup>3</sup> The population projections for 2040 that appear in the impact statement are general population projections, not household projections. Presumably, however, the Wisconsin Department of Administration released 2040 household projections along with its general population projections. Both general population projections and household projections for 2040 are currently available on the Department of Administration’s website. See <http://www.doa.state.wi.us/forms> (click “Population & Household Projections” under “Demographics”).

changes to the location and type of development.” (3) Therefore, the population projections would not affect the traffic forecasts. *Id.*

This reasoning does not support WisDOT’s conclusion that the updated population data would not affect the traffic forecasts. First, although it may be true that the Department of Administration’s general population projections are not direct inputs into the TDM, the record shows that the Department’s household population projections are. See ECF No. 70-1 at 14 (stating that Department’s household data is included in TDM); R. 14179 (stating that Department’s household data was used to create “Transportation Analysis Zones,” or TAZs, in TDM); R. 14181 (same); R. 14180 (stating that “households” are variables in TDM database). If the growth rate for the general population declines significantly, then presumably the growth rate for households will as well. So a decline in the general population growth rate should at least have caused WisDOT to check the revised household data to determine if that growth rate had significantly declined as well. However, so far as it appears from the technical memorandum, this was not done.

Second, WisDOT’s observation that the updated population projections did not affect the anticipated type and location of developments does not, by itself, support the conclusion that the updated population data would not affect traffic forecasts. Although I do not doubt that the type and location of expected developments plays a large role in traffic forecasting, presumably WisDOT will also need to anticipate *how much* of each type of development to expect in a given location in order to prepare an accurate forecast. For example, if WisDOT anticipates that residential housing will be built at some location along Highway 23, certainly it will also want to know approximately how

many households to expect at that location, as the number of households will determine the number of vehicle trips that will begin and end at that location. Thus, if the Department of Administration's updated projections show a decline in population and household growth rates, then it is likely that the growth rate for traffic will be affected, even if the type and location of anticipated development remains the same.

In their reply brief, the defendants point out that the difference between the Department of Administration's 2030 and 2040 population projections for the project area is 5,218 people, which is 6.7% of the projected 2040 project-area population. The defendants seem to imply that therefore the change in projected growth in the area is insignificant. However, WisDOT in its revised technical memorandum did not state that the projected decline in the population growth rate is too small to affect its traffic forecasts. Therefore, I cannot conclude that the size of the projected decline supports WisDOT's decision not to update its forecasts. See *State Farm*, 463 U.S. at 50 (a court "may not accept appellate counsel's *post hoc* rationalizations for agency action"; the agency's action "must be upheld, if at all, on the basis articulated by the agency itself").

For these reasons, I cannot find that WisDOT, when deciding whether to update its traffic forecasts in light of the updated population data, "conducted a reasoned evaluation of the relevant information and reached a decision that, although perhaps disputable, was not 'arbitrary or capricious.'" *Marsh*, 490 U.S. at 385.

### **III. CONCLUSION**

For the reasons stated, **IT IS ORDERED** that the defendants' motion to reinstate the record of decision and enter judgment in their favor is **DENIED**.

**IT IS FURTHER ORDERED** that the defendants' motion to strike is **DENIED**.

Dated at Milwaukee, Wisconsin, this 29th day of April, 2016.

s/ Lynn Adelman

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LYNN ADELMAN  
District Judge